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March 16, 1995 2510-95/33

Ms. Laurie Peterson-Wright EG&G Rocky Flats, Inc. P.O. Box 464, Bldg. 080 Golden, Colorado 80402-0464



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Subject:

Revised March 1, 1995 Meeting Minutes

Technical Working Group Meeting for Operable Unit No. 7

(MTS Contract 353017TB3)

Dear Ms. Peterson-Wright:

Enclosed are revised meeting minutes from the March 1, 1995, technical working group meeting for the OU 7 landfill closure interim measure/interim remedial action and environmental assessment. Revisions have been made in accordance with comments from DOE. Please replace the existing meeting minutes in the project file with this version.

If you have any questions, please contact me at your convenience.

Sincerely,

Myra K. Vaag Project Manager

Enclosure

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cc:	W. Bartholomew w/o	EG&G	B. Caruso	Stoller
	R. Cygnarowicz	EG&G	A. Crockett	Stoller
	T. Lindsay	EG&G	M. Eisenbeis	Stoller
	P. Martin	EG&G	K. Fiebeg	Stoller
	P. Corser	TerraMatrix	S. Franklin	Stoller
	J. Kendall	TerraMatrix	C. Gee	Stoller
			J. Jankousky	Stoller
			D. Palmer	Stoller
			L. Ross w/o	Stoller
			B. Stephanus w/o	Stoller
			OU7 Project File	
			MKV Chron	

Boulder, Colorado 80301-5718

ADMIN RECCRD

## Minutes for the OU 7 Seep Collection/Landfill Closure IM/IRA Technical Working Group Meeting March 1, 1995

The following topics were discussed:

### DOE Feedback from Agency Meeting

CDPHE and EPA were pleased with the presentation of the options analysis at the meeting on February 22, 1995. DOE expects written comments on March 3 and will call if they are not received. DOE requested that EG&G provide documentation for authorization of the Seep Collection and Treatment PAM and a schedule with milestones and backup documentation. DOE also requested that EG&G recall an informal memorandum from the Administrative Record that inaccurately stated "DOE has decided to invoke dispute on the Pond IM/IRA." DOE also stated that if EG&G was going to transmit the formal memorandum stating that DOE stopped work on February 1, DOE would respond with a memorandum from Jessie Roberson that correctly stated the situation regarding the DOE direction to not proceed without written authorization from DOE. In the future, DOE will deal only with the integrating contractor, not with subcontractors.

### Status of Issue Paper for Seep Collection PAM

DOE has had informal discussions with EPA and CDPHE regarding cancellation of the PAM. EPA concurs with cancellation. CDPHE does not concur with cancellation but their reasons are purely political. DOE will present the strategy for reversing the PAM to their upper management on March 2. The reasons for cancellation are twofold: (1) the schedule for landfill closure has been accelerated and the action should be implemented concurrently and (2) risks are within the acceptable range for a resident that infrequently swims in the pond and incidentally ingests seep water.

DOE asked the technical staff to state their honest opinion about the technical feasibility of constructing the seep collection and storage system. One EG&G technical staff person thinks it should be built because the tanks could be used for storing contaminated groundwater after closure. Other EG&G staff and their subcontractors think it should not be built because the driving force behind the PAM has always been political (seep water is an F039 listed waste that is being discharged into a noncompliant impoundment) not technical, the system would be used for only two years, and the seep collection box (excluding the storage tanks) is not consistent with the final remedy.

### Landfill Closure IM/IRA/EA

A roundtable brainstorming session ensued regarding how to get to closure and what is needed to determine the appropriate remedial action by media. The following IHSSs and media were discussed:

IHSS 203 and IHSS 114 - The Inactive Hazardous Waste Storage Area (IHSS 203) and Present Landfill (IHSS 114) will be addressed using the presumptive remedy for landfills. DOE/RTG interprets the area of the presumptive remedy to extend to the dam because the dam is part of the source-control area. Stoller interprets the area of the presumptive remedy to be the landfill only. Required components include a RCRA-equivalent landfill cap to contain the waste (which includes hazardous and non-hazardous constituents), a gas collection/venting layer to control and possible treat landfill gas and ensure cap integrity, a slurry wall to control groundwater, and a diversion ditch to control surface water runoff and erosion. DOE/RTG stressed that the inclusion of each component and subcomponent in the IM/IRA must be justified on the basis of its effectiveness in reducing infiltration and groundwater inflow, dewatering the waste, and reducing risk.

**Spray Evaporation Areas (IHSSs 167.1 and 167.2)** - Arsenic is the only potential contaminant of concern (PCOC) for surface soils and is detected near background concentrations; however, all detections exceed the PPRG. Based on the resolution agreed to by the agencies for arsenic contamination in surface soils at OU3, propose no action required for surface soils detected near background concentrations at OU7.

**Pond Sediments** - No programmatic risk-based preliminary remediation goals (PPRGs) are exceeded; therefore, no risk assessment is necessary for pond sediments. There are currently two options for remedial action: (1) propose no further action or (2) consolidate sediments under the landfill cap.

**East Landfill Pond** - Risks are within the acceptable range for a resident that swims in the pond and uses the pond as his sole drinking water supply. there are three options for remedial action: (1) leave the pond in place, (2) modify and replace the pond, and (3) remove the pond.

If the pond is left in place, the pond water could be delisted under CERCLA. It is unclear if the pond is considered "waters of the U.S." (W.U.S.) or not. The language for Segment 4 streams only includes stock ponds and surface impoundments. DOE and EG&G will investigate this issue. If the pond is left in place, a post-closure permit may be required. The permitting process would be easier if OU7 were all one IHSS. EG&G believes no agency approval is required and will investigate further. DOE has requested an ecological assessment. EG&G will solicit input from Frank Vertucci.

If the pond is modified and replaced to meet regulations for treatment, wetlands mitigation and Preble's mouse habitat mitigation would have to be included as part of the remedial action. The pond sediments would be consolidated under the landfill cap. A new pond or wetlands could be constructed. How would the water be managed? If the pond is placed in the W.U.S. drainage it could become W.U.S.

If the pond is removed, wetlands mitigation and Preble's mouse habitat mitigation would have to be included as part of the action. The pond sediments could be left in place because they pose no risk to human health (concentrations are below the UTL <sub>99/99</sub> or the PPRG) or could be consolidated under the landfill cap. A wetlands assessment would be performed and attached to the IM/IRA/EA DD and a NOI published in the Federal Register.

**Groundwater** - For groundwater downgradient of the dam, propose no action required if the outcome of the human health risk assessment shows that groundwater poses no risk (1E-04 to 1E-06). The risk assessment should be performed in accordance with the methodology being used at other OUs. DOE/RTG suggested proposing to meet alternate concentration limits at boundary wells to ensure that groundwater meets ARARs at the point of compliance.

Point of compliance was discussed. DOE/RTG believes that establishing the point of compliance should be one of the last tasks for the IM/IRA/EA. The point of post-closure groundwater monitoring does not necessarily equal the point of compliance. EG&G will talk to the sitewide point-of-compliance working group and gather information for making a point-of-compliance determination at OU7.

Stoller discussed the current understanding of the nature and extent of contamination in groundwater. Sources of contamination include the landfill; IHSSs 166.1, 166.2, and 166.3 (OU6 trenches); and an unknown upgradient source. Contaminants in leachate in the landfill are primarily benzene, toluene, ethylbenzene, and xylene (BTEX compounds) and radionuclides; contaminants in groundwater in the OU6 trenches include chlorinated hydrocarbons and nitrate; contaminants in groundwater upgradient of the landfill are primarily chlorinated hydrocarbons. Data used include quarterly data from 1990 through 1994 for the existing wells and monthly data (2 months) from 1995 for the new wells. PCOCs were originally identified using the Gilbert methodology for background comparisons. Total and dissolved constituents were used.

Based on direction from Rick Roberts (EG&G), PCOCs are now identified using a UTL <sub>99/99</sub> background comparison and total constituents only. Analytes that exceed the UTL <sub>99/99</sub> and exceed PPRGs become COCs for a human health risk assessment. Stoller is performing the risk assessment to determine if treatment of groundwater is necessary; preliminary results will be presented at the meeting next week.

Leachate Seep - The issue of whether the pond water is F039 listed waste or F039 "contained in" waste must be resolved but does not determine if pond water must be treated. DOE/RTG suggested that risk, not ARARs, is what drives treatment of pond water. DOE will investigate this issue. Until the landfill cap and slurry wall are constructed, surface water is allowed to infiltrate into the waste and groundwater flows in on the north side of the landfill. There are three options for remedial action: (1) passive treatment of seep water, (2) active treatment of seep water at OU1, OU2, the sewage treatment plant (STP), or a new system at OU7; and (3) propose no further action because the risk is at 1E-04 for average concentrations of chemicals of concern (COCs) and 3E-04 for maximum concentrations of COCs. DOE/RTG believes that the media to be managed have nothing to do with the F039 hazardous waste classification.

### **Agency Interface Meeting**

The next agency interface meeting has not been scheduled. Format will consist of presenting the list of items discussed above and reaching some agreement on how each will be addressed for landfill closure. Attendees will be limited to DOE and EG&G team members.

#### **Action Items**

01-186	Completed
187	Determine if a small French drain would decrease head buildup in groundwater west of the landfill using the existing groundwater model (J. Jankousky, Stoller). In progress.
188-193	Completed.
194	Find out what the acceptance criteria are for the Rocky Flats sewage treatment plant (L. Peterson-Wright, EG&G). Acceptance criteria include a maximum of 10,000 gallons per day, total toxic organics = 2.1 mg/L, gross alpha = 40 pCi/L, and gross beta = 50 pCi/L. Completed.
195-198	Completed.
199	Find documentation for decision to do a seep collection PAM instead of an IM/IRA decision document and milestones agreed to by the agencies (L. Peterson-Wright, EG&G). DOE's request exists. No response from CDPHE. Completed.
200	Determine if the East Landfill Pond is considered "Waters of the U.S." (L. Peterson-Wright, EG&G).
201	Resolve issue for seep water; is it "F039" or "F039 contained in?" (L. Peterson-Wright, EG&G).
202	Research implications of extending the IHSS 114 boundary to include all of OU 7 (L. Peterson-Wright, EG&G).

203	Bring an EG&G risk assessment person into the OU 7 working group (L. Peterson-Wright, EG&G).
204	Talk to the sitewide point-of-compliance working group and gather information for making a point-of-compliance determination at OU7 (L. Peterson-Wright, EG&G). The leading edge of the plume is the point of compliance for ARARs. The point of compliance for the remedy is site specific based on technology considerations. Completed.
205	Perform a risk assessment on groundwater downgradient of the dam (M. Vaag, Stoller).

# **Next Meeting**

The next meeting will be at 10:00 a.m. on March 8, 1995, in the EG&G small west conference room.

## List of Attendees

Name	Organization	Phone
Pat Corser	TerraMatrix	(303)879-6260
Mary Eisenbeis	Stoller	546-4474
Kieth Fiebeg	Stoller	546-4456
John Jankousky	Stoller	546-4412
Tom Lindsay	EG&G	966-6985
Peter Martin	EG&G	966-8695
Laurie Peterson-Wright	EG&G Project Manager	966-8553
Paul Pigeon	RTG/DOE Support	966-5611
Myra Vaag	Stoller Project Manager	546-4417
Peg Witherill	DOE Project Manager	966-6585

## **AGENDA**

## OU 7 IM/IRA/EA DD Project Team

Wednesday, March 1, 1995 Small West Conference Room 10:00 AM

- 1. DOE Feedback from Agency Interface Meeting (L. J. Peterson-Wright)
- Discussion of the future roles of DOE and the M&O (P. Witherill)
- 2. Update of Issue Paper for Operable Unit 7 (L. J. Peterson-Wright)
- 3. Groundwater Contamination (S. M. Stoller, L. J. Peterson-Wright)
- Data Set Used
- PCOC identification (old method vs. new)
- Is treatment necessary and appropriate?
- Human Health Risk Assessment
- RCRA Risk Assessment -Delisting Pond
- The role of ARARs in our decisions
- Acceptance criteria for the RFETSSanitary Treatment Plant
- Establishing a "Point of Compliance"
- Additional work in Progress
  - Dilution modeling
  - Time-series plots by well
  - Travel-time estimates (pond in vs. pond out)
- 4. Options Analysis (S. M. Stoller and Rountable)
- Passive Treatment Systems
  - Constructed wetlands
  - SRB reactor
- Active Treatment Systems
  - OU 7 treatment Facility
  - Site-Wide Facility
  - STP
- Narrowing down options
- Regulatory implications of leaving the East Landfill Pond in place
- 5. Discussion of Next Agency Interface Meeting Agenda (Roundtable)

Next meetings:

March 8, 1995, 10:00, Interlocken-Small West Conference Room

Agency Interface Meeting - TBD